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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/647,549

08/25/2003

David Feinleib

MS1-0132USC1

3104

22801 7590 12/04/2009

LEE & HAYES, PLLC  
601 W. RIVERSIDE AVENUE  
SUITE 1400  
SPOKANE, WA 99201

EXAMINER

HUERTA, ALEXANDER Q

ART UNIT

PAPER NUMBER

2427

NOTIFICATION DATE

DELIVERY MODE

12/04/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/647,549	<b>Applicant(s)</b> FEINLEIB, DAVID	
	<b>Examiner</b> Alexander Q. Huerta	<b>Art Unit</b> 2427	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-8,10-15 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10-15 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

On page 8 of the Applicant's Response, Applicant argued that the Examiner failed to address any of the arguments related to the combinability in previous Response filed 03/25/09. With regards to the Response filed on 03/25/09, on page 14, Applicants argue that the combination of Yen and Brodsky is improper because Brodsky requires significant user interaction and thus to assert a user would be enabled to quickly and efficiently retrieve supplemental information would be illogical.

Yen teaches a system for receiving incoming information from multiple sources, both interactive and passive, and for presenting that information to a user. The tuned broadcast signal comprises information in addition to the broadcast television shows such as annotation for those shows. Thus, the system provides the user with additional information related while the show is being presented to providing the user with an interactive viewing experience (Col. 3 lines 16-34, Col. 4 line 65-Col. 5 line 7). Yen further discloses the system uses a background element 121 and foreground element 122. The background element and the foreground element work in together for presenting relevant information to the user. When the background element receives relevant information, it transmits the information item to the foreground element, which can immediately begin the displaying the information item without user interaction (Col. 11 lines 42-57). However, Yen failed to teach that the received supplement data relates to one or more key phrases in the closed-captioning script.

Brodsky was relied upon to teach this limitation since Brodsky teaches that keywords are extracted from the closed-captioning to develop a dictionary of keywords that can be used to request additional information (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 5 lines 36-63, Col. 6 lines 12-42). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of receiving supplemental data that relates to one or more key phrases of a closed captioning script as taught by Brodsky, to improve the information retrieval system of Yen for the predictable result of enabling the user to retrieve supplemental information pertaining to a word or group of words just heard (Col. 3 lines 52-60). The argument regarding to the motivation to combine references is moot in view of a new motivation provided in office action mailed 06/09/09.

On page 9 of the Applicant's Response, Applicants argue that Brodsky does not teach that the supplemental data relates to one or more key phrases in the closed captioning script of a program, but merely teaches that the closed captioning script is used to generate a dictionary.

The Examiner agrees that closed captioning script is used to generate a dictionary that stores list of word and phrases from the program that is currently in progress. Users may then request additional information about words or phrases heard within the program, such as when a newscaster utters "map of France", the user can request additional information and the recognition system will match the word or phrase to words/phrases within the dictionary and then retrieve the additional information from an outside source. The retrieved information is presented as an overlay on the TV broadcast via picture-in-picture, split screen, or by other means (Col. 6 lines 12-42).

Thus, since the words in the closed-captioning script are used to build the dictionary and then are directly used to retrieve additional information Brodsky meets the limitation that “the supplemental data relates to one or more key phrases in the closed captioning script of a program.”

On page 9 of the Applicant’s Response, Applicants further argue that Brodsky when coupled with Yen and Hidary would serve to frustrate the methods of Yen and in particular those of Hidary. Since, Hidary discloses a method that synchronizes web pages with video content and Brodsky’s discloses a dictionary of “recently heard words”, thus the retrieved supplemental content could not be synchronized with the video because the portion with which it would synchronize has already past.

The Examiner respectfully disagrees with Applicant’s arguments because while Brodsky discloses that the dictionary is created using keywords recently heard in the closed-captioning script which does not necessarily suggest that the scene has already past, but merely that the spoken dialog has already occurred. Thus, when a user has heard “France” the user could immediately retrieve additional information about France during the newscast scene about France. Furthermore, Brodsky teaches a means to anticipate requests for a match by relaying “words” already in the buffer by preprocessing searches for those “words”, so that in the event a user makes a request for additional information the system can satisfy the request more quickly (Col. 5 lines 1-10). Therefore, with the Brodsky system users can retrieve information related to the current scene.

On pages 12-14 Applicant argues that Chen fails to teach or suggest that "each of the identified key phrase has the same number of words."

The Examiner respectfully disagrees with Applicant's argument because Chen teaches that processor 11 examines the tokenized document and generates multiword phrases. Processor 11 extracts from each sentence non-overlapping phrases of **two or more words** (Col. 3 lines 3-25). Thus, each identified phrase can have the same number of words, in this case each identified key phrase can have exactly two words. Furthermore, the Examiner fails to see how the teaching of Chen's "two or more words" is wholly indefinite, as it is clear that the non-overlapping phrases selected by processor 11 can be phrases with only two words. Therefore, Chen meets the limitation that "each of the identified key phrase has the same number of words."

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3, 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yen et al. (US Pat. **6,668,278**), in view of Brodsky (US Pat. **5,809,471**), herein referenced as Yen and Brodsky, respectively.

Regarding **claim 1**, Yen discloses "a viewer computing unit (information receiver 110) having a processor, a program enhancement listener implemented as computer

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executable instructions stored on a computer-readable medium and executable on the processor (Col. 4 lines 26-35, Fig. 1) to direct the viewer computing unit to: receive supplemental data sent to a multicast address (Col. 4 line 47-Col. 5 lines 7, i.e. the television signal is broadcasted, which can be considered multicast if the multicast is sent to all users), wherein the received supplemental data relates to ... a closed captioning script” (Col. 3 lines 16-34, Col. 4 line 65-Col. 5 line 7, Col. 5 lines 40-50, Col. 8 lines 34-49, Col. 11 lines 20-31, i.e. Yen teaches of a system that receives supplemental content, such as web links, provided in the closed-captioning script).

“initiating an enhancement action based upon the supplemental data to enhance the program as the video program is being played and to synchronize the supplemental data with scenes in the video, wherein the enhancement action is performed without user interaction” (Col. 7 lines 25-40, Col. 9 lines 33-50, Col. 11 lines 20-31, lines 42-57, i.e. audiovisual material is synchronized with the program. For instance, during the commercial for a Ford truck a link to Ford's website is displayed).

Yen fails to explicitly disclose that “the received supplemental data relates to one or more key phrases of a closed captioning script of a video program”.

Brodsky discloses that “the received supplemental data relates to one or more key phrases of a closed captioning script of a video program” (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 5 lines 36-63, Col. 6 lines 12-42, i.e. Brodsky teaches that keywords are extracted from the closed-captioning to develop a dictionary of keywords that can be used to request additional information). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of receiving supplemental data that relates

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to one or more key phrases of a closed captioning script as taught by Brodsky, to improve the information retrieval system of Yen for the predictable result of enabling the user to retrieve supplemental information pertaining to a word or group of words just heard (Col. 3 lines 52-60).

Regarding **claim 2**, Yen discloses that “the enhancement action comprises activation of a hyperlink” (Col. 3 lines 16-34, Col. 5 lines 40-50, Col. 11 lines 20-32).

Regarding **claim 3**, Yen discloses that “the enhancement action comprises launching executable code” (Col. 3 lines 16-34, Col. 5 lines 40-50, Col. 11 lines 20-32, i.e. Yen teaches of activating a hyperlink to a website, which reads on “launching executable code”).

Regarding **claim 5**, Yen discloses that “computer-executable instructions to direct the viewer computing unit to display the supplemental data concurrently with the primary content” (Col. 9 lines 27-50, Col. 11 lines 20-32, lines 42-57, i.e. the background and foreground elements determine if information items can or should be displayed simultaneously).

**Claims 6-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yen in view of Brodsky, and in further view of Hidary et al. (US Pat. **5,774,644**), herein referenced as Hidary.

Regarding **claim 6**, Yen fails to explicitly “[presenting] the video program within a hypermedia document; and controlling placement of the video program within the hypermedia document using the supplemental data”.



Hidary discloses "[presenting] the video program within a hypermedia document; and controlling placement of the video program within the hypermedia document using the supplemental data" (Col. 7 lines 10-29, i.e. teaches of a JAVA enabled browser that allows a computer to retrieve web pages from a video program. The retrieved web pages are then synchronized with the video content). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of presenting a video program within a hypermedia document and controlling placement of the video program within the hypermedia document using the supplemental data as taught by Hidary, to improve the information retrieval system of Yen for the predictable result of providing the user with a more interactive experience while watching television by providing them with additional information corresponding to the program.

Regarding **claim 7**, Yen discloses "a viewer computing unit having a processor and a display" (Col. 4 lines 26-35, Fig. 1).

Yen fails to explicitly disclose "a hypermedia document stored on computer-readable medium and executable on the processor for graphical rendering on the display, the hypermedia document containing the program enhancement listener".

Hidary discloses "a hypermedia document stored on computer-readable medium and executable on the processor for graphical rendering on the display, the hypermedia document containing the program enhancement listener" (Col. 7 lines 10-29, i.e. teaches of a JAVA enabled browser that allows a computer to retrieve web pages from a video program. The retrieved web pages are then synchronized with the video content). Thus, it would have been obvious to one of ordinary skill in the art to apply the

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technique of storing a hypermedia document on computer-readable medium and executable on the processor for graphical rendering on the display, the hypermedia document containing the program enhancement listener as taught by Hidary, to improve the information retrieval system of Yen for the predictable result of providing the user with a more interactive experience while watching television by providing them with additional information corresponding to the program.

**Claims 8, 10-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidary et al. (US Pat. **5,774,644**), in view of Brodsky (US Pat. **5,809,471**), and in further view of Yen et al. (US Pat. **6,668,278**).

Regarding **claim 8**, Hidary discloses “determining an insertion point there in for the supplemental content; sending the supplemental data to a device having a multicast address; receiving, by the device having the multicast address, supplemental data; initiating, at the determined insertion point, an enhancement action based upon the received supplemental data to enhance a video program as the video program is being played” (Col. 7 lines 10-40, Col. 7 line 65-Col. 8 line 4, i.e. Hidary teaches of URL's that are transmitting via a multicasting connection. The web pages referenced by the URL's are time stamped to be displayed when predetermined related video content is displayed).

Hidary fails to explicitly disclose “automatically and directly associating supplemental data with at least one key phrase in a closed captioning script by parsing

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the closed captioning script and... wherein the enhancement action is initiated without user interaction”.

Brodsky discloses “automatically and directly associating supplemental data with at least one key phrase of a closed captioning script by parsing the closed captioning script” (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 4 lines 4-17, Col. 5 lines 36-63, Col. 6 lines 12-42, i.e. Brodsky teaches that keywords are extracted from the closed-captioning to develop a dictionary of keywords that can be used to request additional information. The system automatically creates the dynamically changing dictionary that associates supplemental data with the key phrases). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of receiving supplemental data that relates to one or more key phrases of a closed captioning script as taught by Brodsky, to improve the enhanced video programming system of Hidary for the predictable result of enabling the user to retrieve supplemental information pertaining to a word or group of words just heard (Col. 3 lines 52-60).

The combination of Hidary and Brodsky still fail to explicitly disclose that “the enhancement action is initiated without user interaction”.

Yen discloses that “the enhancement action is initiated without user interaction” (Col. 11 lines 42-57, i.e. Yen teaches that the foreground element can immediately begin displaying the information item). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of initiating an enhancement action without user interaction as taught by Yen, to improve the enhanced video programming system

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of Hidary for the predictable result of providing the viewer with the convenience of automatically displaying the supplemental information.

Regarding **claim 10**, Hidary discloses that "the supplemental data comprises a hyperlink to a target resource, and the initiating comprises activating the hyperlink to the target resource" (Col. 7 lines 20-30).

Regarding **claim 11**, Hidary discloses that "the supplemental data comprises executable code, and the initiating comprises launching the executable code" (Col. 7 lines 20-25, lines 54-60).

Regarding **claim 12**, Hidary discloses "displaying the supplemental data concurrently with the primary content" (Col. 7 lines 20-30, Col. 7 lines 65-Col. 8 line 4).

Regarding **claim 13**, Hidary discloses "presenting the video program within a hypermedia document; and controlling placement of the video program within the hypermedia document using the supplemental data" (Col. 7 lines 10-29, i.e. teaches of a JAVA enabled browser that allows a computer to retrieve web pages from a video program. The retrieved web pages are then synchronized with the video content).

Regarding **claim 14**, claim 14 is interpreted and thus rejected for the reasons set forth above in the rejection of claim 8. Claim 8 describes a method of receiving supplemental content and initiating an enhancement action and claim 14 describes a computer to perform the method (Hidary: Col 5, Lines 7-8). Thus, claim 14 is rejected.

Regarding **claim 15**, claim 15 is interpreted and thus rejected for the reasons set forth above in the rejection of claim 8. Claim 8 describes a method of receiving supplemental content and initiating an enhancement action and claim 15 describes

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computer-executable instruction for performing the step of the method (Hidary: Col 7, Lines 11-14). Thus, claim 15 is rejected.

**Claims 21-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidary in view of Brodsky, Yen, and in further view of Chen et al. (US Pat. **5,745,602**), herein referenced as Chen.

Regarding **claim 21**, Hidary discloses “a processing device (Col. 5 lines 7-20)... [multicasting] an enhancement action to a multicast address and a program enhancement listener configured to listen to the multicast address for the enhancement action an initiate an enhancement action based upon the supplemental data to enhance a video program as the video program is being played, and wherein the initiating is synchronized with the video based on the association of the supplemental...” (Col. 1 line 65-Col. 2 line 12, Col. 7 lines 10-40, Col. 7 line 65-Col. 8 line 4).

Hidary fails to explicitly disclose “a key phrase module operable by the processing device configured to: parse a closed captioning script to identify one or more key phrases in a ...script, wherein each identified key phrases has the same number of words, the parsing comprising determining a minimum number of words from the closed captioning script required to create unique phrases by iteratively selecting different word lengths and checking for duplication among the resulting created phrases..., wherein the initiating the enhancement action is performed with requiring user interaction, and...association of the supplemental data to one or more key phrases identified from the closed captioning script.”

Brodsky discloses “a key phrase module operable by the processing device configured to: associate the supplemental data to one or more key phrases identified from the closed captioning script” (Col. 1 lines 50-62, Col. 2 lines 12-41, Col. 4 lines 4-17, Col. 5 lines 36-63, Col. 6 lines 12-42, i.e. Brodsky teaches that keywords are extracted from the closed-captioning to develop a dictionary of keywords that can be used to request additional information). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of receiving supplemental data that relates to one or more key phrases of a closed captioning script as taught by Brodsky, to improve the enhanced video programming system of Hidary for the predictable result of enabling the user to retrieve supplemental information pertaining to a word or group of words just heard (Col. 3 lines 52-60).

The combination of Hidary and Brodsky fail to explicitly disclose that “the initiating the enhancement action is performed with requiring user interaction”.

Yen discloses that “the initiating the enhancement action is performed without requiring user interaction” (Col. 11 lines 42-57, i.e. Yen teaches that the foreground element can immediately begin displaying the information item). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of initiating an enhancement action without user interaction as taught by Yen, to improve the enhanced video programming system of Hidary for the predictable result of providing the viewer with the convenience of automatically displaying the supplemental information.

The combination still fails to disclose “pars[ing] a ...script to identify one or more key phrases in a ...script, wherein each identified key phrases has the same number of

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words, the parsing comprising determining a minimum number of words from the ...script required to create unique phrases by iteratively selecting different word lengths and checking for duplication among the resulting created phrases..."

Chen teaches "pars[ing] a ...script to identify one or more key phrases in a ...script, wherein each identified key phrases has the same number of words (Col. 1 lines 6-10, Col. 3 lines 3-25, i.e. Chen discloses a system to automatically identify key phrases from a machine readable document. Initially, processor (11) selects phrases of two words to generate a list of phrases. Thus, each identified key phrases has the same number of words), the parsing comprising determining a minimum number of words from the ... script required to create unique phrases by iteratively selecting different word lengths and checking for duplication among the resulting created phrases..." (Col. 4 lines 40-54, Col. 5 lines 20-30, Col. 6 lines 31-60, i.e. Chen teaches creating unique key phrases by sequentially checking different phrase lengths to determine if the phrase is unique. If it is determined that the phrase is a subphrase/duplicate then it will be removed from the key phrase list).

Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of parsing a script to identify a key phrase by iteratively selecting different word lengths and checking for duplication as taught by Chen, to improve the enhanced video programming system of Hidary for the predictable result of detecting key phrases dependent upon neither natural language processing nor corpus-dependent information (Col. 1 lines 39-45).

Regarding **claim 22**, Hidary discloses “that the program enhancement listener comprises a control embedded in a container” (Col. 7 lines 10-30, i.e. Merriam-Webster's Dictionary defines the word "embed" as to make something an integral part of. Therefore, the Java enabled browser 98 is an essential part of the client software 106, so that the receiving terminal can access the supplemental content on the web, which reads on claimed “control embedded in a container”).

Regarding **claim 23**, Hidary discloses that “the program enhancement listener comprises a control embedded in an HTML page” (Col. 7 lines 10-30, i.e. Merriam-Webster's Dictionary defines the word "embed" as to make something an integral part of. Therefore, the Java enabled browser 98 is an essential part of the client software 106, so that the receiving terminal can access the supplemental content on the web).

Regarding **claim 24**, Hidary discloses that “the program enhancement listener comprises a control embedded in an application” (Col. 7 lines 10-30, i.e. Merriam-Webster's Dictionary defines the word "embed" as to make something an integral part of. Therefore, the Java enabled browser 98 is an essential part of the client software 106, so that the receiving terminal can access the supplemental content on the web).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within



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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Q. Huerta whose telephone number is (571) 270-3582. The examiner can normally be reached on M-F(Alternate Fridays Off) 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Alexander Q Huerta  
Examiner  
Art Unit 2427

November 14, 2009

/Scott Beliveau/  
Supervisory Patent Examiner, Art Unit 2427